



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,395	01/30/2006	Takaki Shimura	Q92594	3611
23373	7590	03/05/2009	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			GEBREMICHAEL, DRUK A	
			ART UNIT	PAPER NUMBER
			3715	
			MAIL DATE	DELIVERY MODE
			03/05/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/566,395

Applicant(s)

SHIMURA ET AL.

Examiner

BRUK A. GEBREMICAHEL

Art Unit

3715

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01/30/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 01/30/2006
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 1-3, 6 and 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wen 6,341,959 in view of Shimura 2002/0059031.

Regarding claim 1, Wen discloses the following claimed limitations; a dementia inspection apparatus comprising an answer obtaining section and a dementia degree inspecting section, wherein the answer obtaining section obtains answers from a subject to each of a first examination chart and a second examination chart (see col.3, lines 39-45 and FIG 3 e.g. see labels *Filling the blank* and *selections*), the first examination chart has inspection sentences in which a character group constituting a story, the second examination chart has a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected (col.4, lines 57-63), and the dementia degree inspection section determines a dementia degree representing a degree of dementia of the subject based on the answers obtained by the answer obtaining section (see col.6, lines 13-25).

Wen does not explicitly teach, the answer obtaining section obtains answers from a subject made within a predetermined answer time limit; the inspection sentences in

which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color, requires a determination as to whether a color of characters constituting the color word is the same color as color represented by the color word, and requires an answer in a style capable of objectively determining whether the determination is correct or error.

However, Shimura teaches, answer obtaining section obtains answers from a subject made within a predetermined answer time limit (Para.0178); the inspection sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color (Para.0146), requires a determination as to whether a color of characters constituting the color word is the same color as color represented by the color word (Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error (Para.0148).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura by incorporating characters that have different colors in the story, wherein the meanings of some of the characters coincide with the colors they represent (see Shimura Para.01047) in order to evaluate the user's ability to recognize the relationships between a given word or phrase in the story to the color it is representing, thereby recommending appropriate diagnosis to rectify the user's problems.

Regarding claim 2, Wen in view of Shimura teaches the claimed limitations as discussed above. Wen further discloses, a first examination chart forming section, wherein the first examination chart forming section has plural kinds of inspection sentences and selects one kind of inspection sentences from the plural kinds of inspection sentences as inspection sentences of the first examination chart, thereby forming the first examination chart (col.4, lines 37-45 and col.5, e.g. *see problem A*).

Shimura further teaches, the first examination chart forming section has plural kinds of inspection sentences tinted with colors in different coloring manners (Para.0146)

Therefore, as already indicated above, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura by incorporating characters that have different colors in the story, wherein the meanings of some of the characters coincide with the colors they represent (see Shimura Para.01047) in order to evaluate the user's ability to recognize the relationships between a given word or phrase in the story to the color it is representing, thereby recommending appropriate diagnosis to rectify the user's problems.

Regarding claim 3, Wen in view of Shimura teaches the claimed limitations as discussed above.

Wen further discloses, the second examination chart forming section has plural kinds of question units each comprising a combination of a question concerning a story represented by the inspection sentences and plural answers which are prepared for the

question and which are to be selected (see col.4, lines 57-63 and col.6, see problem B), a predetermined number of question units are selected from the plural kinds of question units, thereby forming the second examination chart (col.5, lines 1-7).

Regarding claim 6, Wen in view of Shimura teaches the claimed limitations as discussed above.

Shimura further teaches, the inspection sentences, character strings divided by specific kind of characters are tinted with colors different from each other (Para.0146).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura by associating the color of the words with their meaning in order assess the user's ability to differentiate between the color of the word and the meaning it represents thereby determining the mental condition of the user.

Regarding claim 7, Wen in view of Shimura teaches the claimed limitations as discussed above.

Wen further discloses, a chart display section which displays the first examination chart and the second examination chart (col.3, lines 39-45), a start instructing section which instructs the subject to start inputting answers to the first examination chart and the second examination chart (FIG 5, label 561).

Shimura further teaches, an answer time control section which prohibits the subject from inputting answer when time elapsed after the start instructing section instructed to start inputting answer to the first/second examination chart reaches a

predetermined answer time limit in accordance with the first/second examination chart (Para.0178).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura by setting a predetermined time limit (e.g. two minutes) for the user to answer the given question in order to enforce the user to properly pay attention to the presented question and identify the possible answer within the given amount of time, thereby teaching the user how to be more efficient in carrying out tasks.

Regarding claim 8, Wen in view of Shimura teaches the claimed limitations as discussed above.

Wen further discloses, a result display section which displays a dementia degree inspection result obtained by the dementia degree inspecting section (see col.3, lines 42-48),

Regarding claim 9, Wen in view of Shimura teaches the claimed limitations as discussed above.

Shimura further teaches, an inspection receiving permission judging section which permits or prohibits a request for inspection of an inspection wisher in accordance with whether or not a predetermined period of time is elapsed after the inspection wisher received inspection last time (Para.0173).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura by incorporating a test-allowability judging section (e.g. see Shimura FIG 9,

label 137) in order to set a predetermined amount of time (e.g. two months) that must pass before the user is allowed to be tested again, in order to make sure that the user does not have any recollections of the content of the test that he had previously, thereby avoiding erroneous assessment results.

Regarding claim 10, Wen in view of Shimura teaches the claimed limitations as discussed above.

Shimura further teaches, a dementia degree storing section which stores correspondence between answers and dementia degree with respect to both the first examination chart and second examination chart (FIG 9, label 135), wherein the dementia degree inspecting section refers to the dementia degree storing section, and determines a dementia degree of the subject from answers to both the first examination chart and second examination chart of the current subject obtained by the answer obtaining section (Para 0180, lines 6-14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura by including storing and testing sections in order to test the user's current mental status and then estimate the future conditions of the user based on the test result, so that the user would be provided with appropriate recommendations to improve his/her condition.

Regarding claim 11, Wen in view of Shimura teaches the claimed limitations as discussed above.

Wen further discloses, extracting a number of correct meaning grasps with respect to plural questions concerning a story described by the inspection sentences from answers to the second examination chart obtained by the answer obtaining section (col.5, lines 1-8 and lines 58-67), and compares these extracted numbers with predetermined reference values with respect to these numbers, thereby determining the dementia degree, the dementia degree storing section stores the predetermined reference values (col.6, lines 12-25).

Shimura further teaches, from the answers to the first examination chart obtained by the answer obtaining section, the dementia degree inspecting section extracts a number of correct answers as to whether color of characters constituting the color word is the same color as that represented by the color word (Para.0147 and Para.0149).

Therefore, as already indicated above, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura by incorporating characters that have different colors in the story, wherein the meanings of some of the characters coincide with the colors they represent (see Shimura Para.01047) in order to evaluate the user's ability to recognize the relationships between a given word or phrase in the story to the color it is representing, thereby recommending appropriate diagnosis to rectify the user's problems.

With regard to the claimed limitation "a number of error answers erroneously determined, a number of oversights of color words, and a number of erroneous recognition of characters other than the color words", Shimura in general teaches

evaluating the user based on correct response, incorrect response and oversight (e.g. see FIG 6 and Para.0155), and therefore when the general condition of the claimed subject matter is as taught by the prior art, it requires only a routine skill in the art to include such assessment parameters, and therefore this does not distinguish the current invention from the prior art.

Regarding claim 12, Wen in view of Shimura teaches the claimed limitations as discussed above.

Wen further teaches, plural alternatives which are prepared as answers to the questions and one of which is to be selected, the second examination chart includes alternatives for informing that the subject does not know correct answer (see col.4, lines 57-63), the dementia degree inspecting section further extracts a number of unclear answers showing how many alternatives for informing that the subject does not know correct answer the subject selected from answers to the second examination chart obtained by the answer obtaining section (col.6, lines 12-25).

Here also, with regard to the claimed limitation, "determines the dementia degree based on the number of unclear answers, the number of correct answers, the number of error answers, the number of oversights, the number of erroneous recognition, and the number of meaning grasps", Shimura in general teaches, determining the dementia degree based on correct response, incorrect response and oversight (e.g. see FIG 6 and Para.0155), and therefore when the general condition of the claimed subject matter is as taught by the prior art, it requires only a routine skill in the art to include such

additional assessment parameters, and therefore this does not distinguish the current invention from the prior art.

- Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wen 6,341,959 in view of Shimura 2002/0059031, and further in view of Braunberger 2003/0077559.

Regarding claim 4, Wen in view of Shimura teaches the claimed limitations as discussed above.

Wen further discloses, the plural kinds of question units are associated with positions in the inspection sentences the dementia inspection apparatus further comprises a sentence range detecting section which detects a range of the inspection sentences with respect to the first examination chart (see col.4, lines 20-32), the second examination chart forming section selects a question unit associated with a position in the range detected by the sentence range detecting section in the inspection sentence, thereby forming the second examination chart (col.4, lines 57-64).

Wen in view of Shimura does not explicitly teach, a sentence range detecting section which detects a range of the inspection sentences which a subject was able to read within a predetermined answer time limit.

However, Braunberger discloses a method and apparatus for periodically questioning that teaches, a sentence range detecting section which detects a range of the inspection sentences which a subject was able to read within a predetermined answer time limit (Para.0034, lines 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura and further in view of Braunberger by configuring a Testing GUI in order to set a time limit that the user must read a given paragraph so that the paragraph would be removed from the screen as the set time expires and follow-up questions related to the paragraph would be presented to the user in order to evaluate the amount of information that the user is able to comprehend within a given amount of time.

- Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wen 6,341,959 in view of Shimura 2002/0059031, and further in view of Polanyi 2003/0093275.

Regarding claim 5, Wen in view of Shimura teaches the claimed limitations as discussed above.

Shimura further teaches, the color words in the character group of the inspection sentences are tinted with plural colors such that individual color word has characters of the same color (Para.0146).

Wen in view of Shimura does not explicitly teach, characters in the character group except the color words are tinted with a single color.

However Polanyi discloses systems and methods for dynamic reading instruction that teaches, characters in the character group except the color words are tinted with a single color (Para.0036).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of

Shimura and further in view of Polanyi by displaying explanatory sentences on the screen and coinciding the *font color* of the given word with *its meaning* in order to allow the user to clearly memorize such words by recalling their color, so that the user would be able to remember the meanings of the words even after some extended period of time.

- Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wen 6,341,959 in view of Shimura 2002/0059031, and further in view of McElwrath 2004/0009462.

Regarding claim 13, Wen in view of Shimura teaches the claimed limitations as discussed above.

Wen in view of Shimura teaches the claimed limitations except for the features being for a *pre-test* first examination chart and a *pre-test* second examination chart.

Wen discloses the following features, the first examination chart includes sentences in which a character group constituting a story (col.4, lines 57-63), the second examination chart has a combination of plural questions concerning contents of the sentences and plural answers which are prepared for each question and one of which is to be selected (col.4, lines 57-63), wherein the answer obtaining section obtains answers of the subject to both the first examination and the second examination chart (col.3, lines 39-45 and FIG 3, e.g. see *Filling the blank* and *selections*), and wherein the dementia degree inspecting section determines the dementia degree which represents a degree of dementia of the subject based on the answers to the first examination chart and the second examination chart (col.6, lines 13-25).

Shimura further teaches, the story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color, requires a determination as to whether a color of the characters constituting the color word is the same color as color represented by the color word (Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error; the answer obtaining section obtains answers of the subject made within predetermined answer time limits to both the first examination and the second examination chart (Para.0178)

Thus, as indicated above, Wen in view of Shimura teaches the above features except the features being for a pre-test first examination chart and a pre-test second examination chart.

However, McElwrath discloses a learning system that teaches pre-test module for generating different types pre-tests (Para.0467).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura and further in view of McElwrath by incorporating a pre-test module in order to generate pre-tests that have similar features as the actual tests so that the user would know the type of questions that he/she is expected to complete for the actual test, thereby mentally preparing the user.

- Claims 14-16, 19-22, 24-26, 28-29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura 2002/0059031 in view of Wen 6,341,959.

Regarding claim 14, Shimura discloses the following claimed limitations; a dementia inspection server in a dementia inspection system comprising the dementia inspection server and a dementia inspection client connected to each other through a line of communication (Para.0001), the dementia inspection server comprising a chart storing section which stores a first examination chart and a second examination chart (Para.0053), the first examination chart having inspection sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color (Para.0146 and Para.0152), requires a determination as to whether a color of characters constituting the color word is the same color as color represented by the color word (Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error (Para.0148), a chart sending section which sends the first examination chart and the second examination chart to the dementia inspection client (Para.0054), an answer receiving section which receives answers to the first examination chart and the second examination chart from the dementia inspection client (Para.0055), and a dementia degree inspecting section which examines a dementia degree representing a degree of dementia of a subject based on the answers obtained by the answer receiving section (Para.0056).

Shimura does not explicitly disclose, the second examination chart having a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected.

However, Wen discloses a method and system for learning language that teaches, examination chart having a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected (col.4, lines 20-26 and lines 57-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen by including questions that are related to the story in a multiple choice format in order to evaluate the user's ability to recall a lesson learnt in the past when he/she analyzes the given alternatives as a hint to trigger his/her memory.

Regarding claim 15, Shimura in view of Wen teaches the claimed limitations as discussed above.

Shimura further discloses, a first examination chart forming section, wherein the first examination chart forming section has plural kinds of inspection sentences tinted with colors in different coloring manners and selects one kind of inspection sentences from the plural kinds of inspection sentences as inspection sentences of the first examination chart, thereby forming the first examination chart (Para.0146 and FIG 6).

Regarding claim 16, Shimura in view of Wen teaches the claimed limitations as discussed above.

Wen further teaches, a second examination chart forming section, wherein the second examination chart forming section has plural kinds of question units each comprising a combination of a question concerning a story represented by the inspection sentences and plural answers which are prepared for the question and which

are to be selected (col.4, lines 57-63 and col.5, see problem B), a predetermined number of question units are selected from the plural kinds of question units, thereby forming the second examination chart (col.5, lines 1-7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen by generating questions from the story in a multiple choice format in order to evaluate the user's ability to recall a given event when he/she is given some clue to trigger his/her memory.

Shimura in view of Wen teaches the claimed limitations as discussed above.
Shimura further discloses;

Regarding claim 19, in the inspection sentences, character strings divided by specific kind of characters are tinted with colors different from each other (Para.0146),

Regarding claim 20, a dementia degree storing section which stores correspondence between answers and dementia degree with respect to both the first examination chart and second examination chart (Para.0053), wherein the dementia degree inspecting section refers to the dementia degree storing section, and determines a dementia degree of the subject from answers to both the first examination chart and second examination chart of the current subject obtained by the answer obtaining section (Para.0055 and Para.0056).

Regarding claim 21, Shimura in view of Wen teaches the claimed limitations as discussed above.

Shimura further discloses, the answers to the first examination chart obtained by the answer obtaining section, the dementia degree inspecting section extracts a number of correct answers as to whether color of characters constituting the color word is the same color as that represented by the color word (Para.0147 and Para.0149).

Wen further discloses, extracting a number of correct meaning grasps with respect to plural questions concerning a story described by the inspection sentences from answers to the second examination chart obtained by the answer obtaining section (col.5, lines 54-67), and compares these extracted numbers with predetermined reference values with respect to these numbers, thereby determining the dementia degree, and the dementia degree storing section stores the predetermined reference values (col.6, lines 12-25).

With regard to the limitation, "a number of error answers erroneously determined, a number of oversights of color words, and a number of erroneous recognition of characters other than the color words", Shimura in general discloses evaluating the user based on correct response, incorrect response and oversight (e.g. see FIG 6 and Para.0155), and therefore when the general condition of the claimed subject matter is as taught by the prior art, it requires only a routine skill in the art to include such assessment parameters, and therefore this does not distinguish the current invention from the prior art.

Regarding claim 22, Shimura in view of Wen teaches the claimed limitations as discussed above.

When further teaches, in plural alternatives which are prepared as answers to the questions and one of which is to be selected, the second examination chart includes alternatives for informing that the subject does not know correct answer (col.4, lines 57-63), the dementia degree inspecting section further extracts a number of unclear answers showing how many alternatives for informing that the subject does not know correct answer the subject selected from answers to the second examination chart obtained by the answer obtaining section (col.6, lines 12-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen by presenting explanation to the user on the display regarding the questions that he/she answered incorrectly in order to help the user understand the correct answer and also retain the information learnt.

Regarding the limitation, "determines the dementia degree based on the number of unclear answers, the number of correct answers, the number of error answers, the number of oversights, the number of erroneous recognition, and the number of meaning grasps", here also Shimura in general discloses, determining the dementia degree based on correct response, incorrect response and oversight (e.g. see FIG 6 and Para.0155), and therefore when the general condition of the claimed subject matter is as taught by the prior art, it requires only a routine skill in the art to include such additional assessment parameters, and therefore this does not distinguish the current invention from the prior art.

Shimura in view of Wen teaches the claimed limitations as discussed above.

Shimura further discloses,

Regarding claim 24, a result sending section which sends a dementia degree inspection result obtained by the dementia degree inspecting section to the dementia inspection client (FIG 21, label 717),

Regarding claim 25, an inspection receiving permission judging section which permits or prohibits a request for inspection of an inspection wisher in accordance with whether or not a predetermined period of time is elapsed after the inspection wisher received inspection last time (FIG 21, label 718).

Regarding claim 26, Shimura discloses the following claimed limitations; a dementia inspection client in a dementia inspection system comprising a dementia inspection server and the dementia inspection client connected to each other through a line of communication (Para.0001), wherein the dementia inspection client comprises a chart receiving section which receives, from the dementia inspection server, a first examination chart and a second examination chart (Para.0058), the first examination chart having inspection sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color (Para.0146 and Para.0152), requires a determination as to whether a color of characters constituting the color word is the same color as color represented by the color word (Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error (Para.0148), a chart display section which displays the first examination chart

and the second examination chart received by the chart receiving section (Para.0059), an answer obtaining section which obtains answers made within predetermined answer time limits for the first examination chart and the second examination chart displayed on the chart display section in accordance with operation (Para.0060 and Para.0178), and an answer sending section which sends the answers obtained by the answer obtaining section to the dementia inspection server (Para.0061).

Shimura does not explicitly disclose, the second examination chart having a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected.

However, Wen discloses a method and system for learning language that teaches, examination chart having a combination of plural questions concerning contents of the inspection sentences and plural answers which are prepared for each question and one of which is to be selected (col.4, lines 20-26 and lines 57-63).

Therefore, as already indicated it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen by including questions that are related to the story in a multiple choice format in order to evaluate the user's ability to recall a lesson learnt in the past when he/she analyzes the given alternatives as a hint to trigger his/her memory.

Shimura in view of Wen teaches the claimed limitations as discussed above.
Shimura further discloses,

Regarding claim 28, a result receiving section that receives a dementia degree inspection result, which is obtained by the dementia inspection server based on the

answers from the dementia inspection client and sent from the dementia inspection server (FIG 21, labels 717 and 725), and a result display section which displays the dementia degree inspection result received by the result receiving section (see FIG 21, label 726),

Regarding claim 29, a start instructing section which instructs the subject to start inputting answers to the first/second examination chart and, and an answer time control section which prohibits the subject from inputting answer when time elapsed after the start instructing section instructed to start inputting answer to the first/second examination chart reaches a predetermined answer time limit in accordance with the first/second examination chart (Para.0178).

Regarding claim 31, Shimura discloses the following claimed limitations; a dementia inspection system comprising a dementia inspection server and a dementia inspection client connected to each other through a line of communication (Para.0001), wherein the dementia inspection server comprises a first examination chart forming section (Para.0053), the first examination chart forming section has plural kinds of inspection sentences tinted with colors in different coloring manners and selects one kind of inspection sentences from the plural kinds of inspection sentences as inspection sentences of the first examination chart, thereby forming the first examination chart (Para.0146 and Para.0154), the dementia inspection server further comprises a second examination chart forming section (Para.0053), the second examination chart forming section has plural kinds of question units each comprising a combination of a question concerning a story represented by the inspection sentences (Para.0152 and

Para.0154), a chart sending section which sends the first examination chart and the second examination chart to the dementia inspection client (FIG 21, label 712), an answer receiving section which receives answers made within predetermined answer time limits to both the first examination chart and second examination chart from the dementia inspection client (FIG 21, label 713, and Para.0178), and a dementia degree inspecting section which determines a dementia degree representing a degree of dementia of the subject based on the answers obtained by the answer receiving section (Para.0056), the dementia inspection client comprises a chart receiving section which receives the first examination chart and the second examination chart sent from the dementia inspection server (FIG 21, label 721), a chart display section which displays the first examination chart and the second examination chart received by the chart receiving section (FIG 21, label 722), an answer obtaining section which obtains answers made within predetermined answer time limits for the first examination chart and the second examination chart displayed on the chart display section in accordance with operation (FIG 21, label 723 and Para.0178), and an answer sending section which sends the answers obtained by the answer obtaining section to the dementia inspection server (FIG 21, label 724).

Shimura does not explicitly disclose, plural answers which are prepared for the question and which are to be selected, a predetermined number of question units are selected from the plural kinds of question units, thereby forming the second examination chart.

However, Wen discloses method and system for learning a language that teaches, plural answers which are prepared for the question and which are to be selected (col.4, lines 57-63), a predetermined number of question units are selected from the plural kinds of question units, thereby forming the second examination chart (col.5, lines 1-7).

Therefore here also, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen by including questions that are related to the story in a multiple choice format in order to evaluate the user's ability to recall a lesson learnt in the past when he/she analyzes the given alternatives as a hint to trigger his/her memory.

- Claims 17 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura 2002/0059031 in view of Wen 6,341,959 and further in view of Braunberger 2003/0077559.

Regarding claim 17, Shimura in view of Wen teaches the claimed limitations as discussed above.

Wen further teaches, the plural kinds of question units are associated with positions in the inspection sentences (col.4, lines 20-34), and the second examination chart forming section selects a question unit associated with a position in the range detected by the dementia inspection client in the inspection sentence, thereby forming the second examination chart (col.4, lines 57-64).

Shimura in view of Wen does not explicitly teach, the dementia inspection client detects a range in the inspection sentences which the subject was able to read within a predetermined answer time limit.

However, Braunberger discloses a method and apparatus for periodically questioning that teaches, the dementia inspection client detects a range in the inspection sentences which the subject was able to read within a predetermined answer time limit (Para.0034, lines 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura view of Wen and further in view of Braunberger by configuring a Testing GUI in order to set a time limit that the user must read a given paragraph so that the paragraph would be removed from the screen as the set time expires and follow-up questions related to the paragraph would be presented to the user in order to evaluate the amount of information that the user is able to comprehend within a given amount of time.

Regarding claim 27, Shimura in view of Wen teaches the claimed limitations as discussed above.

Wen further teaches, a sentence range detecting section which detects a range in the inspection sentences which the subject was able to read within a predetermined answer time limit with respect to the first examination chart (col.4, lines 20-32).

Shimura in view of Wen does not explicitly teach, a sentence range detecting section which detects a range in the inspection sentences which the subject was able to read within a predetermined answer time limit.

However, Braunberger teaches, a sentence range detecting section which detects a range in the inspection sentences which the subject was able to read within a predetermined answer time limit (Para.0034, lines 1-12).

Therefore, as already indicated above, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura view of Wen and further in view of Braunberger by configuring a Testing GUI in order to set a time limit that the user must read a given paragraph so that the paragraph would be removed from the screen as the set time expires and follow-up questions related to the paragraph would be presented to the user in order to evaluate the amount of information that the user is able to comprehend within a given amount of time.

- Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura 2002/0059031 in view of Wen 6,341,959 and further in view of Polanyi 2003/0093275.

Regarding claim 18, Shimura in view of Wen teaches the claimed limitations as discussed above.

Shimura further discloses, color words in the character group of the inspection sentences are tinted with plural colors such that individual color word has characters of the same color (Para.0146).

Shimura in view of Wen does not explicitly teach, characters in the character group except the color words are tinted with a single color.

However Polanyi discloses systems and methods for dynamic reading instruction that teaches, characters in the character group except the color words are tinted with a single color (Para.0036).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen and further in view of Polanyi by displaying explanatory sentences on the screen and coinciding the *font color* of the given word with *its meaning* in order to allow the user to clearly memorize such words by recalling their color, so that the user would be able to remember the meanings of the words even after some extended period of time.

- Claims 23 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura 2002/0059031 in view of Wen 6,341,959 and further in view of McElwrath 2004/0009462.

Regarding claim 23, Shimura in view of Wen teaches the claimed limitations as discussed above.

Shimura in view of Wen teaches the claimed limitations except for the features being for a *pre-test* first examination chart and a *pre-test* second examination chart.

Shimura discloses the following features, the first examination chart includes sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color, requires a determination as to whether a color of the characters constituting the color word is the same color as color represented by the color word (see FIG 5, FIG 7 and Para.0147), and requires an answer in a style capable

of objectively determining whether the determination is correct or error (Para.0148), the chart sending section sends the first examination chart and the second examination chart to the dementia inspection client (Para. FIG 21, label 712).

Wen further discloses, the second examination chart has a combination of plural questions concerning contents of the sentences and plural answers which are prepared for each question and one of which is to be selected (col.4, lines 57-63).

Thus, as indicated above, Shimura in view of Wen teaches the above features except the features being for a pre-test first examination chart and a pre-test second examination chart.

However, McElwrath discloses a learning system that teaches pre-test module for generating different types pre-tests (Para.0467).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Shimura in view of Wen and further in view of McElwrath by incorporating a pre-test module in order to generate pre-tests that have similar features as the actual tests so that the user would know the type of questions that he/she is expected to complete for the actual test, thereby mentally preparing the user.

Regarding claim 30, Shimura in view of Wen teaches the claimed limitations as discussed above.

Shimura in view of Wen teaches the claimed limitations except for the features being for a *pre-test* first examination chart and a *pre-test* second examination chart.

Shimura discloses the following features, the first examination chart includes sentences in which a character group constituting a story including color words each representing color is tinted with plural colors such that individual color word has characters of the same color, requires a determination as to whether a color of the characters constituting the color word is the same color as color represented by the color word (FIG 5, FIG 7 and Para.0147), and requires an answer in a style capable of objectively determining whether the determination is correct or error (Para.0148), the dementia inspection client obtains through the answer obtaining section answers of the subject made within predetermined answer time limits to both the first examination and the second examination chart and sends the obtained answers to the dementia inspection server (Para.0178).

Wen further teaches, the second examination chart has a combination of plural questions concerning contents of the sentences and plural answers which are prepared for each question and one of which is to be selected (col.4, lines 57-63).

Shimura in view of Wen teaches the above features except the features being for a pre-test first examination chart and a pre-test second examination chart.

However, McElwrath discloses a learning system that teaches pre-test module for generating different types pre-tests (Para.0467).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to modify the invention of Wen in view of Shimura and further in view of McElwrath by incorporating a pre-test module in order to generate pre-tests that have similar features as the actual tests so that the user would

know the type of questions that he/she is expected to complete for the actual test, thereby mentally preparing the user.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruk A. Gebremichael whose telephone number is (571) 270-3079. The examiner can normally be reached on Monday to Friday (7:30AM-5:00PM) ALT. Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bruk A Gebremichael/
Examiner, Art Unit 3715

/Cameron Saadat/
Primary Examiner, Art Unit 3715

